IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

JIAXING SUPER LIGHTING ELECTRIC APPLIANCE CO., LTD. AND OBERT, INC., Plaintiffs, v. CH LIGHTING TECHNOLOGY CO., LTD., ELLIOTT ELECTRIC SUPPLY INC., AND SHAOXING RUISING LIGHTING CO., LTD., Defendants.	)	CASE NO.: 6:20-cv-00018-ADA **JURY TRIAL DEMANDED**

DEFENDANTS' MOTION TO FOR SUMMARY JUDGMENT OF INVALIDITY OF THE '700 PATENT

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Exhibit 2	U.S. Publ. Patent Appl. No. 2016/0113076A1 ("Davenport")
Exhibit 3	Expert Report of Dr. Joshua W. Phinney ("Phinney Rep.")
Exhibit 4	Rough Deposition Transcript of Dr. Joshua W. Phinney ("Phinney Rough Tr.")
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[1] Exhibits 1-4 are exhibits to the declaration of Robert S. Hill, filed herewith. Exhibits A & B are exhibits to the declaration of Michael Lebby, filed herewith.

Defendants CH Lighting Technology Co., Ltd., Shaoxing Ruising Lighting Co., Ltd. and Elliott Electric Supply Inc. (collectively, "Defendants") submit this Motion for Summary Judgment that claims 1, 6, 48, and 49 of U.S. Patent No. 10,378,700 ("the '700 patent") are anticipated by U.S. Publ. Patent Appl. No. 2016/0113076A1 ("Davenport").

I. INTRODUCTION

The '700 patent relates generally to an LED tube lamp that is configured to replace fluorescent lamps. Specifically, the asserted claims of the '700 patent relate to LED tube lamps that can work with different power sources—for example, with the electronic ballasts that were typically used with fluorescent lamps or without those electronic ballasts (*i.e.*, from AC mains power). The asserted claims of the '700 patent further relate to protecting against electrical shock hazards that can happen, for example, when a user is installing a tube lamp where only half of the lamp is connected to the electrical fixture.

But, such retrofit LED tube lamps were well known in the art. Indeed, the supposed points of novelty—an LED tube lamp that is compatible with both a ballast and an AC powerline having shock protection—were not an innovation at all. For example, the Davenport reference discloses an "LED lamp has dual modes of operation from fluorescent lamp fixtures" where the invention specifically "relates to an LED lamp with dual mode operation from a fluorescent lamp fixture wired to supply either mains power or power from an electronic ballast associated with the fixture." Davenport at Abstract; [0001]. Davenport further discloses that "[s]ome embodiments of the inventive lamp are configured to provide additional protection against shock exposure to a lamp installer." Davenport at [0010]. Accordingly, for the reasons discussed below, Defendants request that the asserted claims of the '700 patent are found invalid.

II. LEGAL STANDARD

"A patent is invalid for anticipation under 35 U.S.C. § 102 if a single prior art reference

discloses each and every limitation of the claimed invention." *Purdue Pharma LP v. Epic Pharma, LLC*, 811 F.3d 1345, 1351 (Fed. Cir. 2016). Anticipation is a question of fact but may be resolved on summary judgment if there is no genuine issue of material fact. *See Zenith Electronics Corp. v. PDI Comm. Sys., Inc.*, 522 F.3d 1348, 1356-57 (Fed. Cir. 2008).

III. THE DAVENPORT REFERENCE ANTICIPATES CLAIMS 1, 6, 48, AND 49 OF THE '700 PATENT

According to the '700 patent, "LED lighting technology is rapidly developing to replace traditional incandescent and fluorescent lightings," because LED lights provide a number of benefits, including "improved durability and longevity and far less energy consumption." '700 patent at 1:65-2:10. LED tube lamps are LED lamps that are used to replace fluorescent tube lamps. Typical fluorescent tube lamps involve the use of a ballast. Ballast-compatible LED tube lamps may be used with the ballast and do not require rewiring the fluorescent lighting fixture. *See* Phinney Rep. ¶ 134. Ballast-bypass LED tube lamps receive power from commercial electricity (also known as AC mains) and typically require removal of the ballast. *Id*.

The asserted claims of the '700 patent relate to LED tube lamps that can work with different power sources, such as with or without a ballast. *See, e.g.*, '700 patent at claims 1 and 48. Certain dependent claims further relate to "an installation detection circuit" to help protect against electrical shock. *See, e.g.*, '700 patent at claims 6 and 49.

Davenport, like the '700 patent, acknowledges that "[l]amp designers have recognized that it would be desirable to have an LED retrofit lamp with dual mode operation from either an existing fluorescent lamp ballast associated with a fluorescent lamp fixture, or directly from power mains." Davenport at [0004]. Davenport therefore discloses an LED retrofit tube lamp that "combines dual modes of operation," where "[i]n a first mode, the LED retrofit lamp receives power from power mains in a fluorescent lamp fixture; in an alternative, second mode, the LED retrofit lamp receives

power from a fluorescent lamp electronic ballast in a fluorescent lamp fixture." Davenport at [0007]."

Davenport, again like the '700 patent, also recognizes that "a potential shock hazard is created, which may be life-threatening to a lamp installer during lamp installation, and thus it "would also be desirable to provide such as lamp that can avoid a potential life-threatening electrical shock hazard when such a lamp is placed into a fixture wired to supply power directly from power mains" Davenport at [0005], [0006]. Davenport therefore discloses that "[s]ome embodiments of the inventive lamp are configured to provide additional protection against shock exposure to a lamp installer." Davenport at [0010].

Super Lighting asserts that claims 1 and 48 are entitled to a priority date of June 10, 2015[2] and that claims 6 and 49 are entitled to a priority date of August 26, 2015. *See* Phinney Rep. ¶¶ 234, 243. Davenport was filed on November 26, 2014 and published on April 21, 2016. *See* Davenport. Davenport is therefore prior art to the '700 patent under 35 U.S.C. § 102(a)(2) & (d). Super Lighting does not dispute that Davenport is prior art to the asserted claims of the '700 patent.

A. Claim 1 Is Anticipated by Davenport

Super Lighting's expert, Dr. Joshua Phinney, does not dispute that Davenport discloses an LED tube lamp configured to work with or without a ballast. *See generally*, Phinney Rep. ¶¶ 722-732. In fact, Dr. Phinney disputes that only a single element is missing from Davenport—namely, Dr. Phinney disputes that Davenport discloses "that the external driving signal is a low frequency signal input and transmitted through one of the first and second pins and the third pin across the two ends of the lamp tube." Phinney Rep. ¶ 729. But, Dr. Phinney's report freely acknowledges that "Davenport apparently contemplates an LED lamp being powered by AC power mains input

[2] Defendants dispute that claims 1 and 48 are entitled to this priority date, but that is not relevant for the purposes of this motion as Davenport is prior art under either priority date.

across two ends of the LED lamp." And at his deposition, Dr. Phinney confirmed that this limitation is disclosed in Davenport:

> Q So you would agree that Davenport discloses that the external driving signal is a low frequency signal input and transmitted through one of the first and second pins and the third pin across the two ends of the lamp tube; right?
>
> A Yeah.

Phinney Rough Tr. at 161:7-12. Thus, as discussed in more detail below, there can be no genuine dispute that Davenport discloses all of the limitations of claim 1.

Limitation 1[pre]: A light emitting diode (LED) tube lamp, comprising

Davenport discloses a light emitting diode (LED) tube lamp. Specifically, Davenport discloses that the "present invention relates to an LED lamp with dual mode operation from a fluorescent lamp fixture wired to supply either mains power or power from an electronic ballast associated with the fixture." Davenport at [0001]; *see also* Davenport at [0007] ("In a first mode, the LED retrofit lamp receives power from power mains in a fluorescent lamp fixture; in an alternative, second mode, the LED retrofit lamp receives power from a fluorescent lamp electronic ballast in a fluorescent lamp fixture."); Lebby Rep. ¶¶ 229-231. Thus, to the extent the preamble is found limiting, Davenport discloses this limitation, and Dr. Phinney does not dispute that Davenport discloses this limitation.

Limitation 1[a]: a lamp tube; a first pin and a second pin coupled to a first end of the lamp tube, and a third pin coupled to a second end of the lamp tube;

Davenport discloses a lamp tube having a first pin and a second pin coupled to a first end of the lamp tube and a third pin coupled to a second end of the lamp tube. Specifically, Davenport discloses a "first end of the elongated housing is provided with first and second power connector pins. A second end of the elongated housing is provided with a third power connector pin." Davenport at [0008]; *see also* Davenport at Figs. 1-4; Lebby Rep. ¶¶ 232-234. Davenport therefore

discloses this limitation, and Dr. Phinney does not dispute that Davenport discloses this limitation.

Limitation 1[b]: a first rectifying circuit comprising diodes and connected to the first and second pins, and a second rectifying circuit comprising diodes and connected to the third pin and an output terminal of the first rectifying circuit, wherein the first and second rectifying circuits are for rectifying an external driving signal to produce a rectified signal;

Davenport discloses this limitation. Davenport discloses that "FIG. 5 shows circuitry 200 within LED lamp 102 of above-described FIGS. 1-3," including "a first circuit 210 and a second circuit 280, either of which can power LEDs 300 depending upon whether (a) fluorescent lamp fixture 100 or 115 (FIG. 1 or 2) or (b) fluorescent lamp fixture 120 (FIG. 3) or 130 (FIG. 4) is to be used." Davenport at [0037]. First circuit 210 and second circuit 280 of Davenport are highlighted in annotated Figure 5:

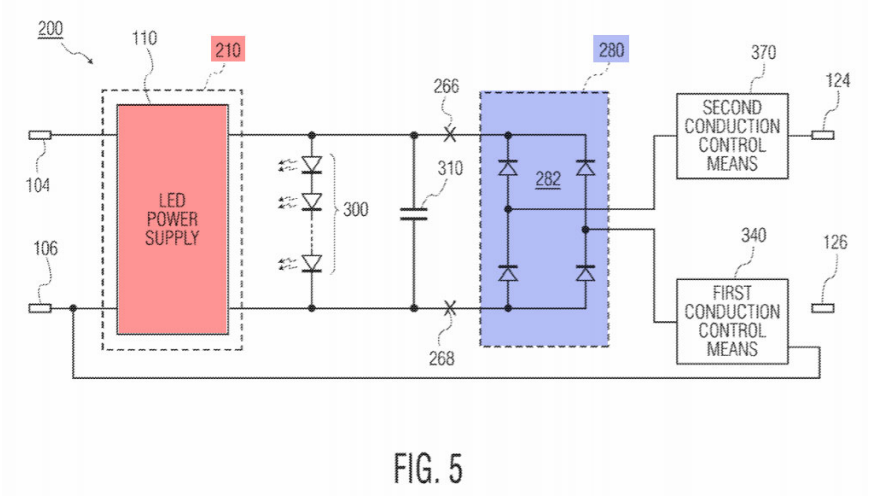

FIG. 5

Davenport discloses a first rectifying circuit comprising diodes and connected to the first and second pins, wherein the first rectifying circuit is for rectifying an external driving signal to produce a rectified signal. Specifically, Davenport discloses that that "LED power supply 110 conditions the power supplied by power source 109 for driving LEDs (not shown) in LED lamp 102, such as by limiting current to the LEDs." Davenport at [0030]; *see also* Davenport at [0033] ("LED power supply 110 conditions the power supplied by power source 109 for driving LEDs (not shown) in LED lamp 102, such as by limiting current to the LEDs.").

Davenport further explains that "FIG. 7 shows a typical non-isolated power supply 250 for LED lamp 102 (FIGS. 1-4) that receives power from power mains via first and second power connector pins 104 and 106, and supplies conditioned power on outputs 222 and 224 to LEDs 300 of FIG. 5." Davenport at [0041]. The power supply of Figure 7 includes rectifier 230. *See* Davenport at Fig. 7. Davenport explains that power supply 250 is one "implementation of first circuit 210." Davenport at [0047], [0051]. *See also* Lebby Rep. ¶¶ 237-241.

Davenport discloses a second rectifying circuit comprising diodes and connected to the third pin and an output terminal of the first rectifying circuit, wherein the second rectifying circuit is for rectifying an external driving signal to produce a rectified signal. Specifically, Davenport discloses "second circuit 280 mainly comprises a rectifier circuit 282 formed from a full-wave diode bridge, for instance. Rectifier circuit 282 can be formed with many other topologies, such as a half-wave bridge or a voltage doubler." Davenport at [0044]. *See also* Lebby Rep. ¶¶ 242-243.

Davenport therefore discloses this limitation, and Dr. Phinney does not dispute that Davenport discloses this limitation.

Limitation 1[c]: a filtering circuit coupled to the two rectifying circuits and an LED module, for filtering the rectified signal to produce a filtered signal;

Davenport discloses a filtering circuit coupled to the two rectifying circuits and an LED module, for filtering the rectified signal to produce a filtered signal. As shown in Figure 5 of Davenport, the first rectifier is located inside the LED power supply (shown in Davenport Figure 7) and the second rectifying circuit is marked as 280 in Figure 5. Both rectifier circuits are coupled to the capacitor 310. *See* Davenport at [0038] ("Capacitor 310 may be shared by both first and second circuits 210 and 280."). Capacitor 310 is coupled to the LED module 300 and serves a filtering function. *See* Lebby Rep. ¶¶ 245-247. Davenport therefore discloses this limitation, and

Dr. Phinney does not dispute that Davenport discloses this limitation.

Limitation 1[d]: an LED module comprising LEDs for emitting light, the LED module configured to be driven by the rectified signal or the filtered signal; and

Davenport discloses an LED module comprising LEDs for emitting light, the LED module configured to be driven by the rectified signal or the filtered signal. Specifically, Davenport discloses that "FIG. 5 shows circuitry 200 within LED lamp 102 of above-described FIGS. 1-3," including "a first circuit 210 and a second circuit 280, either of which can power LEDs 300 depending upon whether (a) fluorescent lamp fixture 100 or 115 (FIG. 1 or 2) or (b) fluorescent lamp fixture 120 (FIG. 3) or 130 (FIG. 4) is to be used." Davenport at [0037]. *See also* Lebby Rep. ¶¶ 248-251. Davenport therefore discloses this limitation, and Dr. Phinney does not dispute that Davenport discloses this limitation.

Limitation 1[e]: a driving circuit coupled between the two rectifying circuits and the LED module, and configured to drive the LED module,

Davenport discloses a driving circuit coupled between the two rectifying circuits and the LED module, and configured to drive the LED module. Davenport discloses that "FIG. 7 shows a typical non-isolated power supply 250 for LED lamp 102 (FIGS. 1-4) that receives power from power mains via first and second power connector pins 104 and 106, and supplies conditioned power on outputs 222 and 224 to LEDs 300 of FIG. 5." Davenport at [0041]. Davenport explains that "[p]ower supply 250, known as a basic offline buck LED driver circuit, includes a field effect transistor (FET) 252, and cooperating capacitor 254, inductor 256, and capacitor 258." *Id*. Davenport also discloses that "[m]any other suitable configurations for isolating and non-isolating LED power supplies will be apparent to persons of ordinary skill in the art." Davenport at [0042]. *See also* Lebby Rep. ¶¶ 252-255. Davenport therefore discloses this limitation, and Dr. Phinney does not dispute that Davenport discloses this limitation.

Limitation 1[f]: wherein the LED tube lamp is configured to receive the external driving signal and emit light in each of two power supply arrangements, the two arrangements being respectively that the external driving signal is a low frequency signal input and transmitted through the first and second pins, and that the external driving signal is a low frequency signal input and transmitted through one of the first and second pins and the third pin across the two ends of the lamp tube;

This is the only limitation of the asserted claims of the '700 patent that Dr. Phinney disputes is present in Davenport.

Dr. Phinney does not dispute that Davenport discloses that the external driving signal is a low frequency signal input and transmitted through the first and second pins. Davenport discloses a "first mode occurs when the LED lamp is inserted into a fluorescent lamp fixture having electrical receptacles that receive the first and second power connector pins and that are directly connected to power mains supplying power at a mains frequency much lower than the ballast frequency." Davenport at [0008]. In this circumstance, the external driving signal is a low frequency signal input and transmitted through the first and second pins. *See* Lebby Rep. ¶ 258.

Dr. Phinney does dispute that Davenport discloses that the external driving signal is a low frequency signal input and transmitted through one of the first and second pins and the third pin across the two ends of the lamp tube. But, Dr. Phinney is mistaken.

Davenport discloses that the LED tube lamp may be used with a number of fluorescent lamp fixtures. For example, Figure 3 of Davenport discloses "a fluorescent lamp fixture including a fluorescent lamp electronic ballast and an LED lamp in accordance with the invention," as shown Davenport at [0015]. In this situation, power is supplied by a ballast.

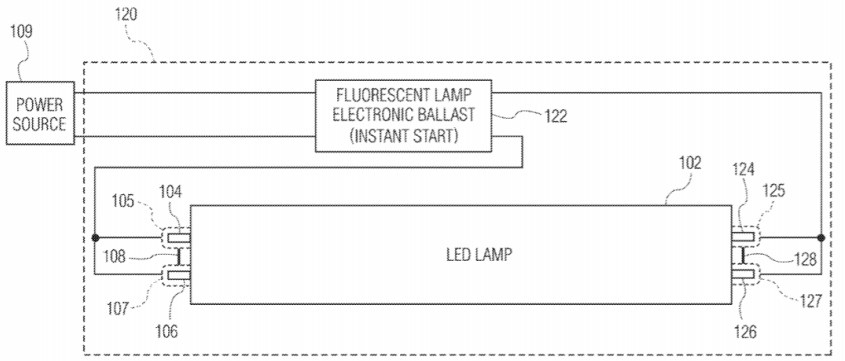

FIG. 3

Figure 1 of Davenport discloses "a fluorescent lamp fixture that is wired to provide mains power directly to power connector pins of an LED lamp in accordance with the invention," as shown below. Davenport at [0013]. As can be seen in Figure 1, in this situation, power is supplied by AC mains to pins on one side of the lamp.

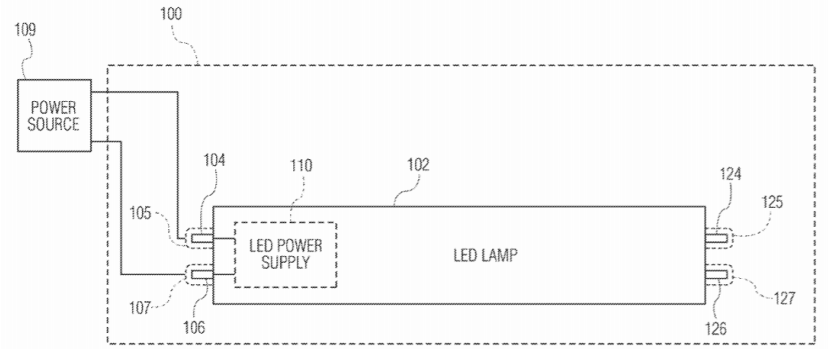

FIG. 1

Of particular interest here is Figure 2. Figure 2 of Davenport discloses that "FIG. 2 is similar to FIG. 1, but provides mains power to all four power receptacles of the fluorescent lamp fixture." Davenport at [0014].

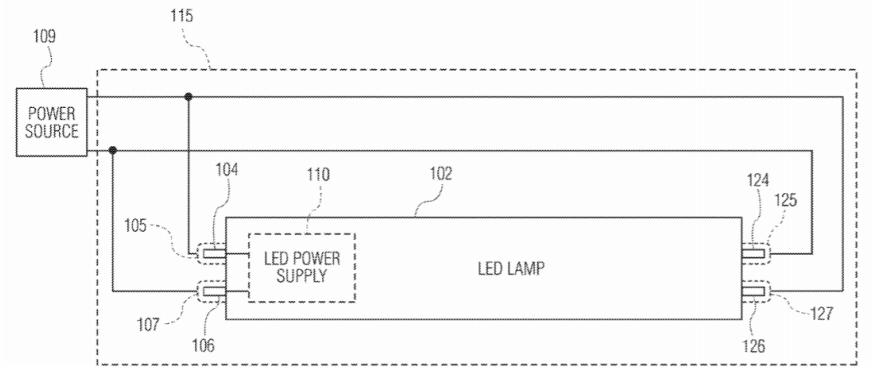

FIG. 2

Thus, Davenport discloses that the external driving signal is a low frequency signal input and transmitted through one of the first and second pins and the third pin across the two ends of the lamp tube.

But this is not the only disclosure in Davenport. Davenport specifically describes an embodiment where "the first circuit is connected to mains power via first and second power connector pins 104 and 106" and "[m]ains power is supplied to third power connector pin 124 when using fluorescent lamp fixture 115 of FIG. 2, for instance." Davenport at [0063]; *see also* Phinney Rough Tr. at 160:4-6 ("Q Mains power is a low frequency signal; correct? A Correct."). Thus, Davenport explicitly discloses that the external driving signal is a low frequency signal input (*i.e.*, mains power) and transmitted through one of the first and second pins and the third pin across the two ends of the lamp tube. Davenport therefore discloses this limitation. *See* Lebby Rep. ¶¶ 256-260.

Dr. Phinney does not appear to actually dispute that Davenport discloses this limitation. As discussed above, Dr. Phinney admits that "Davenport apparently contemplates an LED lamp being powered by AC power mains input across two ends of the LED lamp." Phinney Rep. ¶ 724. In fact, at his deposition, Dr. Phinney admitted that this limitation was met:

> Q So you would agree that Davenport discloses that the external driving signal is a low frequency signal input and transmitted

> through one of the first and second pins and the third pin across the two ends of the lamp tube; right?
>
> A Yeah.

Phinney Rough Tr. at 161:7-12.

Dr. Phinney's dispute appears to relate to features that are not part of the claims. For example, in his report, Dr. Phinney argues that "**Davenport further teaches in the first mode**, whether **power mains is received from power connector pins** at one end or **across two ends of the lamp**, it's the disclosed first circuit that may include a rectifier circuit (such as 230) and that is intended to provide primary power to at least one LED. Therefore, another disclosed rectifier circuit (as 280/282) of the disclosed second circuit does not function to drive the LED for lighting in this first mode." Phinney Rep. ¶ 725 (emphasis added). Rather than support Dr. Phinney's assertion that this limitation is not met, this merely confirms that Davenport discloses this limitation. Dr. Phinney explicitly agrees that Davenport discloses that power mains (*i.e.*, a low frequency power) is received from power connector pins across two ends of the lamp, which is all that this claim requires. Dr. Phinney's apparent dispute that the second rectifier is not operative when low frequency power is received across both ends of the lamp is simply not part of the claims. Nothing in the claims requires that both rectifiers are active in all modes of operation of the LED tube lamp.

At his deposition, Dr. Phinney made a similar assertion that appears unrelated to the claim limitations. In an attempt to rehabilitate his testimony, when asked by Super Lighting about Davenport, Dr. Phinney again merely confirmed that Davenport discloses this limitation. Specifically, Dr. Phinney stated:

> Q With respect to Davenport, it does it provide circuitry, in your opinion, does it provide circuitry that is able to offer in two power supply arrangements depending on the strike and if you need context you can look at claim 1 again?

> A No, I think it does not include that so when we were looking at figure 2, **I think that does show this instance where you are applying low frequency AC signal across there** but to configure Davenport to handle that situation, all you -- all that -- the inspire needs installer needs to operated a switch. The installer needs to go and configure the thing by hand using the switch to make it work in one of those two modes and I just see that as different from the claims of the '700 Patent that you know, providing the circuitry that's doing that configuration for you.

Phinney Rough Tr. at 177:24-178:16 (emphasis added). Thus, Dr. Phinney agrees that Davenport discloses this limitation. While it is unclear exactly what switch Dr. Phinney was talking about, nothing in the claims precludes an installer from configuring the LED tube lamp by hand.

Dr. Phinney also argues that the first and second conduction control means are only for use with an electronic ballast (*i.e.*, high frequency power) (*see* Phinney Rep. ¶ 726), but Dr. Phinney ignores the plain disclosure of Davenport. Davenport explains that the first and second conduction control means perform functions when the LED tube is connected to mains power. *See, e.g.*, Davenport at [0055], [0060], [0063], [0068]. Dr. Phinney agrees that mains power is low frequency power. *See* Phinney Rough Tr. at 160:4-6 ("Q Mains power is a low frequency signal; correct? A Correct.").

In sum, there can be no genuine dispute that Davenport discloses this limitation.

Limitation 1[g]: wherein the LED tube lamp is configured such that when the received external driving signal is a low frequency signal, the LED tube lamp causes the rectified signal or the filtered signal to be used by the driving circuit for driving the LED module to emit light; and

Davenport discloses that the LED tube lamp is configured such that when the received external driving signal is a low frequency signal, the LED tube lamp causes the rectified signal or the filtered signal to be used by the driving circuit for driving the LED module to emit light. Specifically, Davenport discloses that "[i]n a first mode, the LED retrofit lamp receives power from power mains in a fluorescent lamp fixture." Davenport at [0007]. As discussed above with

respect to limitation 1[e], Davenport explains that "[p]ower supply 250, known as a basic offline buck LED driver circuit, includes a field effect transistor (FET) 252, and cooperating capacitor 254, inductor 256, and capacitor 258." Davenport at [0041]. As shown in Figure 7, the rectified signal is the output of rectifier 230, which leads directly to capacitor 254, and the driving circuit is comprised of components gate 253, diode 260 and inductor 256. *See* Lebby Rep. ¶¶ 261-265. Davenport therefore discloses this limitation, and Dr. Phinney does not dispute that Davenport discloses this limitation.

Limitation 1[h]: wherein the LED tube lamp is configured such that the driving circuit does not drive the LED module to emit light, when an external driving signal input through one of the first and second pins and the third pin across the two ends of the lamp tube is provided by an electrical ballast.

Davenport discloses that the LED tube lamp is configured such that the driving circuit does not drive the LED module to emit light, when an external driving signal input through one of the first and second pins and the third pin across the two ends of the lamp tube is provided by an electrical ballast. Specifically, Davenport discloses that "[i]n FIG. 3, electrical power from fluorescent lamp electronic ballast 122 is supplied to LED lamp 102 through second power connector pin 106, via electrical receptacle 107, and through third power connector pin 124, via electrical receptacle 127." Davenport at [0034].

As can be seen in Figures 5 and 7 of Davenport, when power is supplied through connector pins 106 and 124, the driving circuit is off and does not drive the LED module to produce light. *See* Lebby Rep. ¶¶ 266-269.

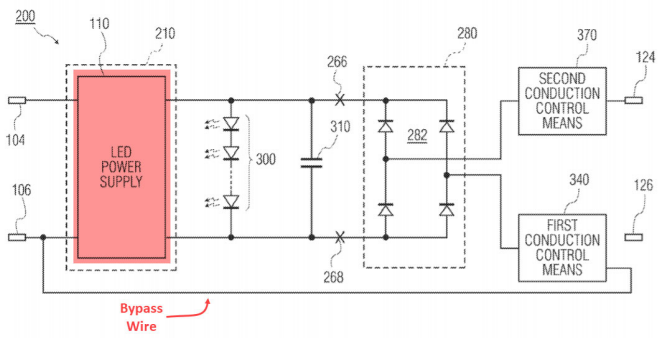

FIG. 5

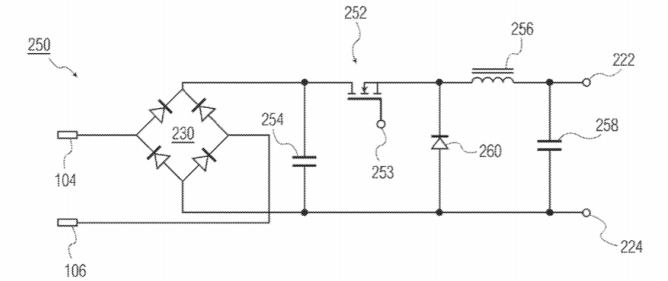

FIG. 7

Davenport therefore discloses this limitation, and Dr. Phinney does not dispute that Davenport discloses this limitation.

B. Claim 6 Is Anticipated by Davenport

Claim 6 depends from claim 1 and "further comprising an installation detection circuit coupled to the two rectifying circuits and the LED module, and configured such that when the LED tube lamp is properly connected to a lamp socket, the installation detection circuit conducts current or allows or causes the LED module to be driven by the rectified signal; and when the LED tube lamp is not properly connected to a lamp socket, the installation detection circuit prevents the LED module from being driven by the rectified signal." Davenport discloses such an installation detection circuit. Dr. Phinney does not dispute that Davenport discloses this limitation.

Davenport explains that "[i]t would also be desirable to provide such as lamp that can avoid a potential life-threatening electrical shock hazard when such a lamp is placed into a fixture wired to supply power directly from power mains." Davenport at [0006]. Accordingly, Davenport

discloses that "[s]ome embodiments of the inventive lamp are configured to provide additional protection against shock exposure to a lamp installer." Davenport at [0010].

Specifically, Davenport discloses a "first conduction control means 340" used "to permit the mitigation of a potentially life-threatening electrical shock hazard when such a lamp 102 (FIGS. 1-4) is inserted into a fluorescent lamp fixture (e.g., 100, 115, 120 or 130 of FIGS. 1-4) by an installer." Davenport at [0060]. Davenport discloses that the first conduction control means 340 "can be embodied as a capacitor or a switch situated in the open position that is configured, for each exposed power connector pin, to prevent current conduction at the mains frequency in an amount exceeding a current threshold level when measured through a non-inductive 500 ohm resistor connected directly between the foregoing each exposed power connector pin and earth ground." Davenport at [0060]. Davenport discloses that the "foregoing feature of first conduction control means 340 for limiting conduction of current is closely related to the Underwriter Laboratory test procedure in the United States for mitigating the above-mentioned potentially life-threatening electrical shock hazard to an installer of an LED lamp." Davenport at [0060]; *see also* Davenport at [0068]; [0069].

As shown in Figure 5, pasted below, the installation detection circuit is comprised of first conduction control means 340. First conduction control means 340 connects to pin 106, the input of the LED POWER SUPPLY, which can be seen in Figure 7 to connect to the first bridge rectifier. First conduction control means 340 also connects to the second bridge rectifier 282. First conduction control means 340 is further coupled to LEDs 300. *See also* Lebby Rep. ¶¶ 270-277.

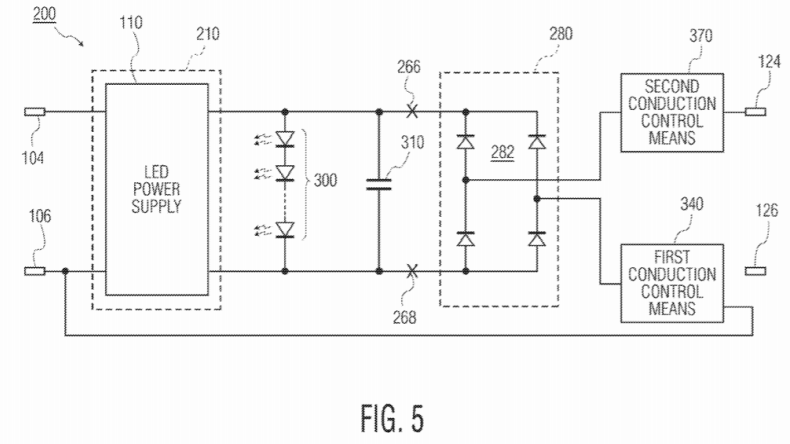

FIG. 5

Davenport therefore discloses this limitation, and Dr. Phinney does not dispute that Davenport discloses this limitation.

C. Claim 48 Is Anticipated by Davenport

Claim 48 depends from claim 1 and further requires that "when the external driving signal provided by an electrical ballast is input across the two ends of the lamp tube, the rectified signal or the filtered signal bypasses at least a component of the driving circuit, and then drives the LED module to emit light." Dr. Phinney does not dispute that Davenport discloses this limitation.

As discussed above with respect to limitation 1[h], when power is supplied through connector pins 106 and 124, the driving circuit is off and does not drive the LED module to produce light. The entire LED power supply (the driving circuit) is being bypassed by the bypass wire indicated below. The power then goes on through rectifier 282 to produce light. *See* Lebby Rep. ¶¶ 278-282.

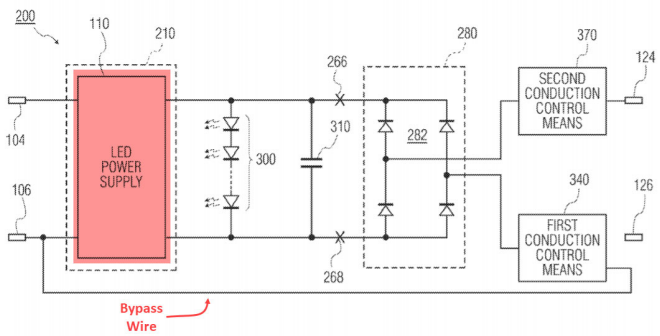

FIG. 5

Davenport therefore discloses this limitation, and Dr. Phinney does not dispute that Davenport discloses this limitation.

D. Claim 49 Is Anticipated by Davenport

Claim 49 depends from claim 6 and further requires that "the installation detection circuit includes a switch circuit coupled between two detection terminals of the installation detection circuit, configured to be in a conducting state to make the installation detection circuit conduct current, and configured to be in a cut-off state to make the LED tube lamp enter in a non-conducting state." Davenport discloses such an installation detection circuit. Dr. Phinney does not dispute that Davenport discloses this limitation.

As discussed above with respect to claim 6, the installation detection circuit is comprised of first conduction control means 340. Davenport discloses that the first conduction control means 340 "can be embodied as a capacitor or a switch situated in the open position that is configured, for each exposed power connector pin, to prevent current conduction at the mains frequency in an amount exceeding a current threshold level when measured through a non-inductive 500 ohm resistor connected directly between the foregoing each exposed power connector pin and earth ground." Davenport at [0060].

The first conduction control means 340 has two detection terminals, shown in red in annotated Figure 5 below.

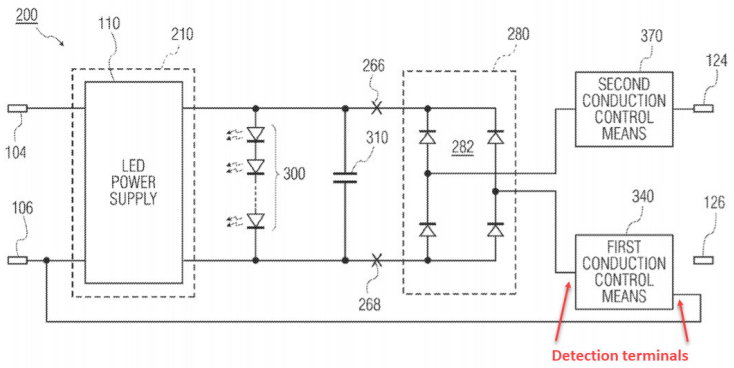

FIG. 5

Davenport describes 13 embodiments of the invention, the properties of which are tabulated in Figure 11. As shown in embodiment 8 of Table 11, element 340 (the installation detection circuit) consists of a mechanical switch 344. Davenport discloses that "[r]eferring to FIG. 11, switches 344 and 376 can be implemented in various forms. They could constitute mechanical switches." Davenport at [0083]. Davenport explains that "[f]or safety, it is desirable for any switches used to realize first or second conduction control 340 or 370 to be provided to an installer in an open, or non-conducting, state." Davenport at [0084]. *See also* Lebby Rep. ¶¶ 283-290.

Davenport therefore discloses this limitation, and Dr. Phinney does not dispute that Davenport discloses this limitation.

IV. CONCLUSION

For the foregoing reasons, Defendants respectfully request that this Court enter summary judgment that the asserted claims of the '700 patent are invalid as anticipated by the Davenport reference.

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Respectfully Submitted,

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CERTIFICATE OF SERVICE

I hereby certify that counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system on August 9, 2021.

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